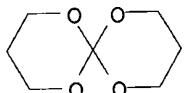


L7 ANSWER 9 OF 130 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 2000:763706 CAPLUS  
DOCUMENT NUMBER: 134:131904  
TITLE: Investigation on cationic ring-opening polymerization  
of 1,5,7,11-tetraoxaspiro [5,5] undecane in the  
presence of low molecular weight tetraols  
AUTHOR(S): Guo, Y.-M.; Zou, Y.-F.; Pan, C.-Y.  
CORPORATE SOURCE: Department of Polymer Science and Engineering,  
University of Science and Technology of China, Anhui,  
Hefei, 230026, Peop. Rep. China  
SOURCE: Polymer (2000), Volume Date 2001, 42(4), 1337-1344  
CODEN: POLMAG; ISSN: 0032-3861  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB A four-armed tetraol, poly(1,5,7,11-tetraoxaspiro-[5,5]-undecane) tetraol (poly(TOSU)), was prep'd. by the cationic ring-opening polymn. of TOSU using BF3.cndot.OEt2 as initiator in the presence of 6,6-bis(5-hydroxy-2-oxapentyl)-4,8-dioxaundecanediol-1,11 [BHDU] chain transfer agent. The structure of poly(TOSU) was characterized by 1H, 13C NMR and FTIR spectra. GPC curves showed that the polymer has two fractions of high and low mol. wts.; however, each had a relatively narrow mol. wt. distribution. The mol. wt. of the polycarbonate tetraols was controlled by the molar ratio of TOSU consumed to initial BHDU. The mechanism of the ring opening polymn. and chain transfer is outlined.  
IT 42954-97-2P, 1,5,7,11-Tetraoxaspiro-[5,5]-undecane homopolymer  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(mechanism of cationic ring-opening polymn. of tetraoxaspiroundecane in presence of tetraol producing four-arm star polymers)  
RN 42954-97-2 CAPLUS  
CN 1,5,7,11-Tetraoxaspiro[5.5]undecane, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 24472-02-4  
CMF C7 H12 O4



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

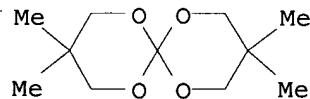
L7 ANSWER 56 OF 130 CAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 1991:644063 CAPLUS  
 DOCUMENT NUMBER: 115:244063  
 TITLE: Photoresist compositions for fine patterning  
 INVENTOR(S): Oie, Masayuki; Kawada, Masaji; Yamada, Takamasa  
 PATENT ASSIGNEE(S): Nippon Zeon Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03107163	A2	19910507	JP 1989-243926	19890920

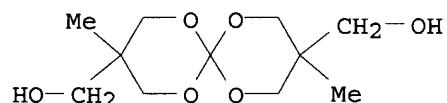
PRIORITY APPLN. INFO.: JP 1989-243926 19890920

AB The title compns. contain: (a) alkali-sol. phenolic resins, and (b) spiroorthocarbonates. These compns. suitable for patterning using short-wavelength radiations provide excellent performance for fine patterning. Thus, a soln. contg. m-cresol-p-cresol novolak 100, 2,4-bis(trichloro methyl)-6-phenyl-s-triazine 2, I 23, and F-contg. surfactant 0.01 parts in Et 2-methoxypropionate was applied on Si wafer and prebaked to form a 1.0-.mu.m-thick resist layer. Exposure to far UV and development with 2.38% Me4NOH gave pos. high-contrast pattern with 0.94-.mu.m thickness.

IT 65849-85-6 100855-04-7  
 RL: USES (Uses)  
 (pos.-working photoresists contg., for short-wavelength radiations)  
 RN 65849-85-6 CAPLUS  
 CN 1,5,7,11-Tetraoxaspiro[5.5]undecane, 3,3,9,9-tetramethyl- (9CI) (CA INDEX NAME)



RN 100855-04-7 CAPLUS  
 CN 1,5,7,11-Tetraoxaspiro[5.5]undecane-3,9-dimethanol, 3,9-dimethyl- (9CI)  
 (CA INDEX NAME)

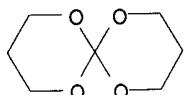


L7 ANSWER 32 OF 130 CAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 1998:25409 CAPLUS  
 DOCUMENT NUMBER: 128:128758  
 TITLE: Polymerizable composition containing onium borate  
 initiator and its cured materials  
 INVENTOR(S): Toba, Yasumasa  
 PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10001507	A2	19980106	JP 1996-155066	19960617
PRIORITY APPLN. INFO.:		JP 1996-155066 19960617		
OTHER SOURCE(S): MARPAT 128:128758				
AB Title compn., useful for molded plastics, sealants, inks, coatings, resists, etc., contains (A) a polymn. initiator comprising $[BYmZn]$ - ( $Y = F, Cl; Z = Ph$ substituted by $\geq 2$ electron-withdrawing groups selected from F, cyano, $NO_2$ , and $CF_3$ ; $m = 0-3$ ; $n = 1-4$ ; $m + n = 4$ ), (B) a sensitizer, and (C) acid-curable compd. The initiator shows high sensitivity and good solv. to resins and effectively generate acids, which induce hardening of (C). Thus, (A) diphenyliodonium tetrakis(pentafluorophenyl)borate 3, (B) anthracene 0.5, and (C) ERL 4221 (3,4-epoxycyclohexylmethyl 3,4-epoxy- <del>cyclohexane</del> carboxylate) 100 parts were blended, coated on Al plate, and irradiated with UV to give tack-free cured film.				
IT	42954-97-2P	1,5,7,11-Tetraoxaspiro(5,5)undecane homopolymer		
	RL: IMF (Industrial manufacture); PREP (Preparation)			
	(polymerizable compns. contg. onium borate initiators, sensitizers, and acid-curable compds.)			
RN	42954-97-2	CAPLUS		
CN	1,5,7,11-Tetraoxaspiro[5.5]undecane, homopolymer (9CI)	(CA INDEX NAME)		

CM 1

CRN 24472-02-4  
 CMF C7 H12 O4



L7 ANSWER 33 OF 130 CAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 1998:8664 CAPLUS  
 DOCUMENT NUMBER: 128:115380  
 TITLE: Sulfonium complex polymerization initiators, initiator  
 compositions and polymerizable compositions containing  
 the same, and their cured products  
 INVENTOR(S): Toba, Yasumasa  
 PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09328506	A2	19971222	JP 1996-146877	19960610
			JP 1996-146877	19960610

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 128:115380

AB The sulfonium complex polymn. initiators comprise bis(2-hydroxyethyl) sulfonium cations and nonnucleophilic anions and their compns. contain sensitizers. The polymerizable compns. contain the initiator compns. and acid-curable or radically polymerizable compds. Application to inks, photoresists, adhesives, etc., is indicated. Thus, EtOAc soln. of 5.00 parts PhCH<sub>2</sub>Br and 3.57 parts 2,2'-thiodiethanol were kept at room temp. for 5 days, filtered, and dried to give 4.59 parts bis(2-hydroxyethyl)benzylsulfonium bromide, 5.00 parts of which was treated with 3.32 parts Ag tetrafluoroborate in acetonitrile at room temp., filtered, pptd. with di-Et ether, and crystd. to give 3.25 parts bis(2-hydroxyethyl)benzylsulfonium tetrafluoroborate (I). A compn. comprising 3 parts I and 100 parts pentaerythritol triacrylate was applied onto Al plate and exposed to UV to give a tack-free coating without odor.

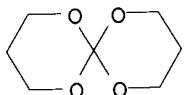
IT 42954-97-2P, 1,5,7,11-Tetraoxaspiro(5,5)undecane homopolymer  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (sulfonium complex polymn. initiators, its compns., and curable compns. thereof)

RN 42954-97-2 CAPLUS  
 CN 1,5,7,11-Tetraoxaspiro[5.5]undecane, homopolymer (9CI) (CA INDEX NAME)

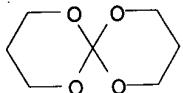
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CRN 24472-02-4

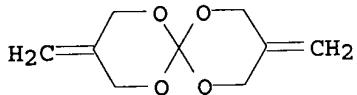
CMF C7 H12 O4



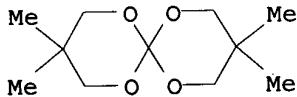
L7 ANSWER 65 OF 130 CAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 1990:497535 CAPLUS  
 DOCUMENT NUMBER: 113:97535  
 TITLE: A new approach to spiroorthocarbonates and new  
 orthocarbonic acid derivatives  
 Mues, Peter; Buysch, Hans Josef  
 Zent. Forsch., Bayer A.-G., Krefeld-Uerdingen, D-4150,  
 Germany  
 AUTHOR(S):  
 CORPORATE SOURCE:  
 SOURCE: Synthesis (1990), (3), 249-52  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 OTHER SOURCE(S): CASREACT 113:97535  
 AB Simple processes have been developed, which give in good or excellent  
 yields new diphenoxylkanediylidioxymethanes, sym. and unsym.  
 spiroorthocarbonates, spirocyclic orthothiocarbamic acid esters, and  
 acetals of urea by successive or simultaneous substitution of chloro and  
 phenoxy groups contained in dichlorodiphenoxymethane.  
 IT 24472-02-4P, 1,5,7,11-Tetraoxaspiro[5.5]undecane  
 55849-58-6P 65849-85-6P 96837-21-7P  
 128773-26-2P 128773-27-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)  
 RN 24472-02-4 CAPLUS  
 CN 1,5,7,11-Tetraoxaspiro[5.5]undecane (9CI) (CA INDEX NAME)



RN 55849-58-6 CAPLUS  
 CN 1,5,7,11-Tetraoxaspiro[5.5]undecane, 3,9-bis(methylene)- (9CI) (CA INDEX  
 NAME)

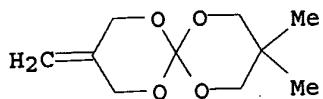


RN 65849-85-6 CAPLUS  
 CN 1,5,7,11-Tetraoxaspiro[5.5]undecane, 3,3,9,9-tetramethyl- (9CI) (CA INDEX  
 NAME)

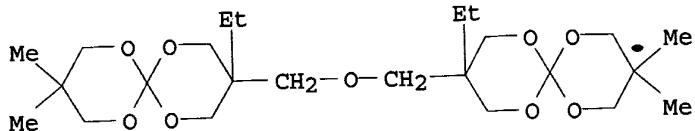


RN 96837-21-7 CAPLUS  
 CN 1,5,7,11-Tetraoxaspiro[5.5]undecane, 3,3-dimethyl-9-methylene- (9CI) (CA  
 INDEX NAME)

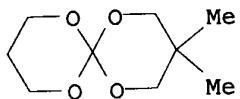
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RN 128773-26-2 CAPLUS  
CN 1,5,7,11-Tetraoxaspiro[5.5]undecane, 3,3'-[oxybis(methylene)]bis[3-ethyl-9,9-dimethyl- (9CI) (CA INDEX NAME)



RN 128773-27-3 CAPLUS  
CN 1,5,7,11-Tetraoxaspiro[5.5]undecane, 3,3-dimethyl- (9CI) (CA INDEX NAME)



L7 ANSWER 29 OF 130 CAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 1998:259490 CAPLUS  
 DOCUMENT NUMBER: 129:19721  
 TITLE: Adhesives for catheter tubes to prep. catheters  
 INVENTOR(S): Endo, Takeshi; Mera, Hiroshi  
 PATENT ASSIGNEE(S): Terumo Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10108906	A2	19980428	JP 1996-267497	19961008
			JP 1996-267497	19961008
PRIORITY APPLN. INFO.: JP 1996-267497				
AB	In prep. catheters from catheter tubes using e.g. UV hardenable adhesives, the adhesives show vol. shrinkage of -3 to 8% during hardening and have viscosity $\leq$ 10 P prior to hardening to improve the prep'd. catheter quality.			
IT	207603-37-0			
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)			
	(adhesives for catheter tubes to prep. catheters)			
RN	207603-37-0 CAPLUS			
CN	1,5,7,11-Tetraoxaspiro[5.5]undecane, 3-methyl- (9CI) (CA INDEX NAME)			

